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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,621

02/19/2004

Takashi Imai

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11/17/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

HASSAN, AURANGZEB

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,621

Applicant(s)

IMAI, TAKASHI

Examiner

Aurangzeb Hassan

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2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/14/04, 8/28/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 6/14/04 and 8/28/06 have been reviewed by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 9-14, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Pierre Bertin et al. (US Publication Number 2002/0029090, hereinafter "Pierre").

The Examiner has provided additional citations from Pierre in order to better understand the prior art as per the 102(b) rejection.

4. As per claim 1 Pierre teaches an information processing apparatus capable of communication with an external unit connected thereto (peripheral, paragraphs [0004-

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0006]), comprising: a connection unit for connecting said external unit (elements 11/12); a first control unit (element 14) connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus; a second control unit (element 15) connectable with said external unit for controlling communication between said connected external unit and said information processing apparatus; and a switching unit (switching circuit, element 13, figure 2) for selecting said first control unit or said second control unit as control unit connected with said external unit, for communication between said connected external unit and said information processing apparatus (paragraphs [0031-0035], functionality as switching between the USB Controller 14 and the master controller 15, microprocessor).

5. As per claims 9 and 17, Pierre teaches an apparatus, method and computer-readable storage medium, for an information processing apparatus capable of communication with an external unit connected thereto via a connection unit (decoder, element 1, figure 2), comprising: a first control step of controlling, using a first control unit (element 14) connectable with the external unit via the connection unit, communication between the connected external unit and the information processing apparatus (first connector, element 11, figure 1A, B, 2); a second control step of controlling, using a second control unit (element 15) connectable with the external unit via the connection unit, communication between the connected external unit and the information processing apparatus (second connector, element 12, figure 1A, B, 2); and a switching step of selecting execution (switching circuit, element 13, figure 2) of said

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first control step or execution of said second control step as a control step of controlling communication between said connected external unit and the information processing apparatus (paragraphs [0031-0035], functionality as switching between the USB Controller 14 and the master controller 15, microprocessor).

6. As per claims 2 and 10, Pierre teaches an apparatus and method wherein said switching step further comprises a determination step of determining the type of the connected external unit, and includes (two positions, lines 1-2, paragraph [0031]) selecting execution of said first control step (first position, lines 2-7, paragraph [0031]) or execution of said second control step (second position, lines 7-12, paragraph [0031]) as said control step for controlling the communication between the external unit and the information processing apparatus, in correspondence with the determined type of said external unit (paragraph [0031]).

7. As per claims 3 and 11, Pierre teaches an apparatus and method wherein said first control step is a device control step, and wherein if it is determined in said determination step that the external unit is a USB host unit in conformity with the Universal Serial Bus communication standards (on the B type USB connector a reception of VBUS supply voltage on USB controller, lines 10 – 14, paragraph [0032]) , then said first control step is selected in said selection step (triggers the switching of the USB controller to B type, line 13, paragraph [0032]), so as to perform communication between the external unit and the information processing apparatus in said first control

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step (paragraph [0032]).

8. As per claims 4 and 12, Pierre teaches an apparatus and method wherein the connection unit is an AB type connector in conformity with the Universal Serial Bus communication standards, and wherein if a B type connector is connected with said connection unit, it is determined in said determination step that the external unit is the USB host unit (first connector is a B type USB connector, paragraph [0019]).

9. As per claims 5 and 13, Pierre teaches an apparatus and method wherein said second control step is a host control step, and wherein if it is determined in said determination step that said external unit is a USB device unit in conformity with the Universal Serial Bus communication standards (A type USB connector routed to the inputs/outputs of USB controller, lines 6-7, paragraph [0033]), said second control step is selected in said selection step (disappearance of signal representative of the appearance of a supply voltage triggers switching to master mode A type connector, lines 7-11, paragraph [0033]), so as to perform communication between the external unit and the information processing apparatus in said second control step (paragraph [0033]).

10. As per claims 6 and 14, Pierre teaches an apparatus and method wherein the connection unit is an AB type connector in conformity with the Universal Serial Bus communication standards, and wherein if an A type connector is connected with the

connection unit, it is determined in said determination step that the external unit is the USB device unit (second connector is an A type USB connector, paragraph [0023]).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 7,8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pierre in view of Ying et al. (US Publication Number 2003/0172223, hereinafter "Ying").

13. As per claims 7 and 15, Pierre teaches an apparatus and method comprising: an execution status determination step of determining an execution status of said first control step and said second control step (monitoring of voltage on pins and receiving inputs of a -data signal and a +data signal, paragraphs [0036-0038]).

Pierre fails to teach a warning step of, if it is determined in said execution status determination step that said first control step or said second control step is in execution, and said control step, selected from said first step and said second control step in correspondence with the type of the external unit determined in said determination step and controlling communication between the external unit and the information processing

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apparatus, is in execution, giving a warning to an operator of the information processing apparatus, wherein in said selection step, said control step that is in execution is selected as said control step of controlling communication between the external unit and the information processing apparatus.

Ying analogously teaches an apparatus and method comprising: a warning step of (busy, paragraph [0034]), if it is determined at said execution status determination step that said first control step or said second control step is in execution, and said control step, selected from said first step and said second control step in correspondence with the type of said external unit determined by said determination step (connected and induced from the data input ends D+ and D-, paragraphs [0030-0032]) and controlling communication between said external unit and said information processing apparatus, is in execution, giving a warning to an operator (displayed as red, yellow and green, paragraph [0040]) of said information processing apparatus, wherein at said selection step, said control unit in execution is selected as said control step of controlling communication between said external unit and said information processing apparatus .

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Pierre with the above teachings of Ying. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to be able to clearly tell the user the current situation of the host, in a USB switching environment so the user may operate

under a friendlier atmosphere (paragraph [0016]).

14. Pierre modified by the teachings of Ying as applied to claims 7 and 15 above, as per claims 8 and 16, Ying teaches an apparatus and method wherein if it is determined in said use status determination step that said control step in execution is no longer in execution (red light displayed when sharer is busy and host can not switch, paragraph [0040]), said control step that has been in execution is selected in said selection step as said control step of controlling communication between the external unit and the information processing apparatus (yellow light displayed when host is not in an online state and no other host is using the USB, paragraph [0040]).

Response to Arguments

15. The Examiner has included additional citations to assist the applicant in better understanding Pierre and the current rejection.

16. Applicant's arguments filed 8/28/2006 have been fully considered but they are not persuasive. The applicant argues:

1.) PTO-892 was neither received nor present in the Image File Wrapper.

2.) Berlin does not teach or suggest having two USB controllers present much less suggest any switching arrangement that would select between two USB controllers to select which of them is to be connected with an external apparatus via connectors.

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17. As per argument 1, the Examiner has included the proper PTO-892 form.

18. As per argument 2, the Examiner disagrees. The Examiner has provided additional citations in order to better understand the control unit from the claims in the form of elements 14 and 15. Since the controllers 14 and 15 are embodied in a USB environment and are control units the limitations necessitated by the claims are complete. Clearly from this citation one of ordinary skill would see that Pierre teaches a first and second control unit capable of being connected to an external apparatus via connectors.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Publication Number 2003/0236934 teaches a first and second connector with a switching mechanism via a controller. US Publication Number 2003/0172223 teaches USB device with switching.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH
11/8/2006


KIM HUYNH
SUPERVISORY PATENT EXAMINER

11/14/06